F. No. 1-1/2018-TEL Government of India Ministry of Education Department of Higher Education TEL Division ***

Shastri Bhawan, New Delhi Dated 07.12.2020

OFFICE MEMORANDUM

Subject: Invitation to participate in an IIT Bombay, ISRO, AICTE Mapathon

IIT Bombay, ISRO and AICTE have joined hands to conduct a national level Mapathon. The objective of this exercise is to bring national/state/district level mapping data in an easily accessible format through an open source GIS software, QGIS. Another important objective is to identify and train students from your own district, capable of doing these studies, to help in your district administration.

Please note some important dates:

- Registration open: 7 Dec, 2020 18 Dec, 2020
- Submission of completed maps: 14 Dec, 2020 31 Dec, 2020
- Results: 04 Jan, 2021 10 Jan, 2021

2. Sample problem statements of this Mapathon are available at the registration site <u>https://iitb-isro-aicte-mapathon.fossee.in/</u>.

3. ISRO provides all the required data. In addition, any district level local data that you may have can also be superimposed, and your district specific problems can be studied.

4. I request you to bring this IIT Bombay ISRO AICTE Mapathon to the attention of all colleges (arts, science, commerce, engineering, etc.) in your district, and invite their students and faculty to participate. There will be certificates for all completed entries and prizes for best entries. Admission to this competition is free of cost. Any motivated student/faculty can easily learn the process through the freely available instructional material.

5. The open source software QGIS required to be used in this Mapathon can be downloaded free of cost. Instructional material required to learn QGIS is available through self-learning Spoken Tutorials: <u>https://spoken-tutorial.org/tutorial-search/?search foss=QGIS&search language=English</u>. These tutorials will soon be available in Hindi, Kannada, Malayalam, Tamil and Telugu dubbing.

6. If you need more information on this Mapathon, you may contact the organiser Prof. Kannan Moudgalya at 9869 32 6979 or <u>kannan@iitb.ac.in</u>.

(Vishwajeet Kumar) Director (ICT) Tele:- 011- 2338 5220

To,

All District Collectors

Representative Problem Statements for the IIT Bombay ISRO AICTE Mapathon

- 1. Map of hospital beds available for COVID treatment
- 2. Map of locust infestation
- 3. Map of stubble burning and air quality
- 4. Map of Indian roads, including rural and urban road networks
- 5. Map out places affected by diseases outbreaks, such as dengue, malaria, etc
- 6. Map of archaeological hotspots
- 7. Flood maps
- 8. Map of water resources for agriculture and rural drinking supply
- 9. Map of subsistence farming
- 10.Map of rural schools, ration shops
- 11.Wind and Latent Heat Flux Maps
- 12.Map of climate friendly top 10 cities of India using Weather data
- 13.Maps for visualizing Heat Island Effect and its impact calculator.
- 14.Maps for Solar/Wind Energy Potential Forecasting
- 15.Vulnerability maps for national highway
- 16.Monthly Scale Wind and Latent Heat Flux Maps
- 17.Maps for visualizing Heat Island Effect
- 18.Urban flood mapping and its solution.
- 19.Maps for Monitoring of urban built-up area based on development control regulation
- 20.State wise Percent Forest Mapping and afforestation site selection for different type of plant species
- 21. Monitoring and conservation of waterbody
- 22.Preparation of cartographic quality map
- 23.Shoreline Change Maps
- 24.Land Degradation Maps
- 25.Choose your own topic